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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,581 08/05/2003		08/05/2003	Robert Johnson	S0 00963/1/US	1446
28523	7590 12/29/2005			EXAMINER	
PFIZER IN	. • .		KIM, YUNSOO		
PATENT D EASTERN		ENT, MS8260-1611	ART UNIT .	PAPER NUMBER	
GROTON,			1644		

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		App	lication No.	Applicant(s)					
Office Action Summary			634,581	JOHNSON ET AL	<b></b>				
			miner	Art Unit					
_			soo Kim	1644					
Period fo	The MAILING DATE of this communi or Reply	ication appears (	on the cover sheet	with the correspondence ac	idress				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE Monsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum stare to reply within the set or extended period for reply reply received by the Office later than three months a ed patent term adjustment. See 37 CFR 1.704(b).	AILING DATE C of 37 CFR 1.136(a). In unication. ututory period will apply will, by statute, cause to	OF THIS COMMUINT TO THE PROPERTY OF THIS COMMUNICATION OF THIS COM	NICATION. a reply be timely filed  ONTHS from the mailing date of this c ABANDONED (35 U.S.C. § 133).					
Status									
1)	Responsive to communication(s) file	d on 19 October	r 2005.						
		2b) ☐ This action	<del>_</del>						
3)	Since this application is in condition	•—		atters, prosecution as to the	e merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)🖂	Claim(s) 1-29 is/are pending in the a	pplication.							
•	4a) Of the above claim(s) <u>18-28</u> is/are withdrawn from consideration.								
5)[	Claim(s) is/are allowed.								
6)🖂	Claim(s) <u>1-17,29</u> is/are rejected.								
	Claim(s) is/are objected to.								
	Claim(s) are subject to restric	tion and/or elect	tion requirement.						
Applicati	on Papers								
9)[	The specification is objected to by the	Evaminer							
-	The drawing(s) filed on is/are:		or h) Objected t	o by the Evaminer					
.0/	Applicant may not request that any object			-					
	Replacement drawing sheet(s) including			* *	ED 1 121/d\				
11)	The oath or declaration is objected to		-	• • •	` '				
	inder 35 U.S.C. § 119	•							
_	•	for foreign priorit	v under 35 U.S.C	& 119(a)-(d) or (f)					
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
-/1	1. Certified copies of the priority of	documents have	been received						
	2. Certified copies of the priority of			Application No					
	3. Copies of the certified copies of			· ·	Stage				
	application from the Internation			m reserved in the realistic	Clago				
* 5	See the attached detailed Office action	•	,	ot received.					
			·						
Attachmen	t(s)								
	e of References Cited (PTO-892)			v Summary (PTO-413)					
	e of Draftsperson's Patent Drawing Review (P nation Disclosure Statement(s) (PTO-1449 or I			o(s)/Mail Date f Informal Patent Application (PT0	D-152)				
	r No(s)/Mail Date	10001001	6)  Other: _	·	<b></b> ,				

Art Unit: 1644

## **DETAILED ACTION**

1. Applicants' amendments filed 10/19/05 have been entered.

Claims 1, 2, 6, 12 and 13 have been amended.

Claim 29 has been added.

Claims 1-17 and 29 are under consideration.

- 2. In view of applicants' amendments, the rejections under the 35 U.S.C. 112, first and second paragraphs (sections 5-9) set forth in the office action mailed 7/8/05 have been withdrawn.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Athwal et al. (WO01/94585, IDS reference, No.1, of record) in view of Relton (WO97/45140, of record) for the reasons set forth in the previous office action mailed 7/8/05.

Applicants' arguments filed on 10/19/05 have been fully considered but they are not persuasive.

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Applicants' argue that the '585 publication does not teach the stable formulation and the '140 publication does not teach nonproteinaceous polymer attached to an antibody.

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Contrary to Applicants' argument, the limitation of nonproteinaceous polymer was taught in the '585 publication (p. 8, Fig 13). As the combined teachings of references disclose all the limitations of the claimed invention, the "stability" is the expected property of the antibody formulation. Furthermore, the '140 publication teaches above antibody formulation comprising acetate buffer at pH 4-6.5, in the presence of salt (i.e. NaCl) is free from aggregates (p.3). It is examiner's position that the combinations of teaching remain obvious.

- 5. The following new grounds of rejections are necessitated by Applicants' addition of new claim filed on 10/19/05.
- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claims 1 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Athwal et al. (WO01/94585, IDS reference, No.1) in view of Relton (WO97/45140).

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The '585 publication teaches modified antibody comprising nonproteinaceous polymer covalently attached to an antibody through a succinimide moiety linker which has a specificity for human TNFa, CDP 870 (p. 7-9, 41, Fig 13, abstract and claims 35-42), poly(ethyleneglycol) polymer, methoxypoly(ethyleneglycol) p. 8, lines 5-15) and covalent linkage of methoxypoly(ethyleneglycol) polymers to a lysine residue via succinimide moiety (Fig 13).

The '585 publication does not teach a stable formulation.

However, the '140 publication teaches a stable (i.e. having less than 5% of aggregates, p. 3, lines 18-23), antibody formulation comprising about 50mg/ml-300mg/ml (1.e. 100 –350 mg/ml, p. 3, lines 10-15), in acetate buffer at pH 4-6.5 (p. 6, lines 12-20) in the presence of 110mM of NaCl (i.e. salt, p. 19, Example 4).

As acknowledged in p. 12 of the specification of instant application, having 125mM of NaCl in the formulation achieves intended use, "tonifying", claims 11, 12, 14-16 are included.

The '140 publication further teaches the higher concentration formulation is more useful to achieve various methods of administration in therapy (p.2-3, p. 6)

Therefore, one of the ordinary skill in the art would have been motivated to combine the modified TNF antibody (CDP 870) as taught by the '585 publication to the stable formulation taught by the '140 publication to increase stability and to achieve various forms of administration.

From the teachings of references, it would have been obvious to one of ordinary skill in art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of the ordinary in the art at the time of invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

8. No claims are allowable.

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yunsoo Kim whose telephone number is 571-272-3176. The examiner can normally be reached on Monday thru Friday 8:30 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yunsoo Kim

Patent Examiner

Technology Center 1600

December 16, 2005

Patrick J. Nolan, Ph.D.

**Primary Examiner** 

12/23/05

Technology Center 1600